

LISTING OF CLAIMS:

1. (previously presented) An indicator assembly for indicating the level of liquid in a tank, said indicator assembly comprising:

a float external to the tank that rises and falls with the level of liquid in the tank and that produces a magnetic field that moves vertically as the float rises and falls;

a plurality of magnetically actuatable switches that are actuated as the magnetic field passes said switches; and

a plurality of lights that are electrically connected with said switches and that are turned on or off as said magnetic field passes said switches.

2. (original) An indicator assembly as set forth in claim 1 wherein said lights are LEDs and said switches are Hall effect transistors.

3. (original) An indicator assembly as set forth in claim 1 further comprising a remote readout that is electrically connected with said plurality of switches for indicating remotely from said tank the level of liquid in said tank.

4. (original) An indicator assembly as set forth in claim 1 wherein said plurality of lights comprises a single column of lights associated in a one to one relationship with said plurality of switches, each one of said lights being either on or off depending the state of its associated switch.

5. (original) An indicator assembly as set forth in claim 1 wherein said plurality of lights comprises a first column of first lights and a second column of second lights, forming pairs of two lights including a first light and an associated second light, each pair of two lights being associated in a one to one relationship with one of said plurality of switches, in each pair of two lights one of said first and second lights being on and the other one of said first and second lights being off depending on the state of said switch associated with said row of two lights.

6. (original) An indicator assembly as set forth in claim 5 wherein said first lights are a first color and said second lights are a second color different from said first color.

7. (original) An indicator assembly as set forth in claim 6 wherein said first lights are red and said second lights are green.

8. (original) An indicator assembly as set forth in claim 1 wherein said plurality of lights includes a plurality of first lights of a first color and a plurality of second lights of a second color.

9. (original) An indicator assembly as set forth in claim 8 wherein said first lights are red and said second lights are green.

10. (original) An indicator assembly as set forth in claim 1 wherein said switches and said lights are on the same circuit board.

11. (original) An indicator assembly for indicating the level of liquid in a tank in response to movement of a float that rises and falls with the level of liquid in the tank and that produces a magnetic field that moves vertically as the float rises and falls, said indicator assembly comprising:

a plurality of magnetically actuatable switches that are actuatable as the magnetic field passes said switches;

an electrically actuated visible indicator electrically connected with said switches and that is selectively actuatable as the magnetic field passes said switches; and

a remote readout that is electrically connected with said switches for indicating remotely from the tank the level of liquid in the tank.

12. (original) An assembly as set forth in claim 11 wherein said electrically actuated visible indicator comprises a plurality of lights that are selectively turned on and off as the magnetic field passes said switches.

13. (original) An assembly as set forth in claim 12 wherein said lights are arranged in a single column and each one of said lights in said single column is either on or off.

14. (original) An assembly as set forth in claim 12 wherein said lights are arranged in pairs, and in each pair, one and only one of said lights is on.

15. (original) An assembly as set forth in claim 14 wherein the two lights in each one of said pairs are of a different colors.

16. (previously presented) Liquid level indicator apparatus comprising:
a circuit board;
a plurality of LED's on said circuit board arranged in a series of rows, each row having at least two LED's; and
a plurality of magnetically actuatable switches on said circuit board and associated in a one to one relationship with said rows of LED's;
said circuit board adapted to be mounted adjacent a container of liquid, said switches being actuatable serially as the liquid level in the container rises and falls thereby to turn said LED's on or off.

17. (original) Apparatus as set forth in claim 16 wherein each one of said rows of LED's on said circuit board includes two LED's of different colors associated electrically with said switches so that one and only one of said LED's in each row is turned on at a time.

18. (original) Apparatus as set forth in claim 17 wherein said switches are Hall effect transistors.

19. (previously presented) A method of indicating level of liquid in a tank, comprising the steps of:
moving a magnetic field external to the tank past a series of magnetically actuatable switches connected with a series of lights, in response to rise and fall of the liquid level in the tank;
actuating one of the switches with the moving magnetic field; and
turning a light on or off in response to actuation of the switch.

20. (original) A method as set forth in claim 19 wherein the series of lights includes rows of lights each row including at least two lights of different colors, and wherein said step of turning a light on or off in response to actuation of the switch comprises turning one light of the at least two lights on and the other light of the at least two lights off.

21. (original) A method as set forth in claim 19 wherein said the series of lights includes rows of lights each including a single light, and wherein said step of turning a light on or off in response to actuation of the switch comprises turning the one either on or off.

22. (previously presented) Apparatus for indicating the level of liquid in a tank in response to movement of a magnetic field that rises and falls over a span as the level of liquid in the tank varies, said apparatus comprising:

first indicator means having a first visible state for indicating visibly the amount of the span that is above the magnetic field;

second indicator means having a second visible state different from the first visible state for indicating visibly the amount of the span that is below the magnetic field; and

means for changing the visible state of said first indicator means and of said second indicator means in response to movement of the magnetic field.

23. (previously presented) Apparatus as set forth in claim 22 wherein said first indicator means comprises a first plurality of visible indicators in a first array and said second indicator means comprises a second plurality of visible indicators in a second array.

24. (previously presented) Apparatus as set forth in claim 23 wherein the first plurality of visible indicators have a visible state that is different from the visible state of the second plurality of visible indicators.

25. (previously presented) Apparatus as set forth in claim 24 wherein said first and second pluralities of visible indicators are arrays of lights of different colors.

26. (previously presented) Apparatus for indicating the level of liquid in a tank in response to movement of a magnetic field that rises and falls over a span as the level of liquid in the tank varies, said apparatus comprising:

a first indicator responsive to a change in the magnetic field caused by movement of the magnetic field over the span adjacent said first indicator, said first indicator having a first visible state for indicating visibly the amount of the span that is above the magnetic field; and

a second indicator responsive to a change in the magnetic field caused by movement of the magnetic field vertically over the span adjacent said second indicator, said second indicator having a second visible state different from the first visible state for indicating visibly the amount of the span that is below the magnetic field.

27. (previously presented) Apparatus as set forth in claim 26 wherein the first indicator has a variable length proportional to the amount of the span that is above the magnetic field and the second indicator has a variable length proportional to the amount of the span that is below the magnetic field.

28. (previously presented) Apparatus as set forth in claim 26 wherein the first visible state of the first indicator is a first illuminated state and wherein the first visible state of the second indicator is a second illuminated state different from the first illuminated state.

29. (previously presented) Apparatus as set forth in claim 28 wherein the first illuminated state is illumination with a first color and the second illuminated state is illumination with a second color.

30. (previously presented) Apparatus for indicating the level of liquid in a tank in response to movement of a magnetic field that rises and falls over a span as the level of liquid in the tank varies, said apparatus comprising:

at least two adjacent sets of electrically actuatable latching visible indicators forming pairs of at least two visible indicators, the visible indicators in the first set being actuatable by the magnetic field to a first visible state and the visible indicators in the second set being actuatable by the magnetic field to a second visible state different from the first visible state;

all of the electrically actuatable visible indicators being latchable so that a visible indicator maintains its visible state when the magnetic field moves away until another, subsequent, magnetic field causes the visible indicator to switch to another visible state.

31. (previously presented) Apparatus as set forth in claim 30 wherein the electrically actuatable visible indicators are lights that are electrically actuatable to be illuminated.

32. (previously presented) Apparatus as set forth in claim 31 wherein the visible states are states of color.

33. (previously presented) Apparatus as set forth in claim 31 wherein the lights are electrically connected with switches that are turned on or off as said magnetic field passes said switches, each pair of lights being associated in a one to one relationship with one switch, in each pair of lights one light being on and the other light being off depending on the state of said switch associated with said pair.

34. (New) Apparatus for indicating the level of liquid in a tank in response to movement of a magnetic field that rises and falls over a span as the level of liquid in the tank rises and falls, said apparatus comprising:

a set of switches actuatable by the magnetic field;

a set of visible indicators electronically actuatable by the switches to a first visible state or to a second visible state different from the first visible state;

the switches being latchable so that a visible indicator maintains its visible state when the magnetic field moves away until another, subsequent, magnetic field causes the visible indicator to switch to the other visible state.

35. (New) An indicator assembly for indicating the level of liquid in a tank, said indicator assembly comprising:

a float external to the tank that rises and falls with the level of liquid in the tank and that produces a magnetic field that moves vertically as the float rises and falls;

a plurality of switches that are actuated as the magnetic field passes said switches; and

a plurality of lights that are electrically connected with said switches and that are switched between a first visible state and a second visible state as said magnetic field passes said switches;

wherein said plurality of lights comprises only one column of lights associated in a one to one relationship with said plurality of switches, each one of said lights being in either the first visible state or the second visible state depending on the state of its associated switch;

all of said switches being latchable so that each light maintains its visible state when the magnetic field moves away until another, subsequent, magnetic field causes the light to switch to the other visible state.